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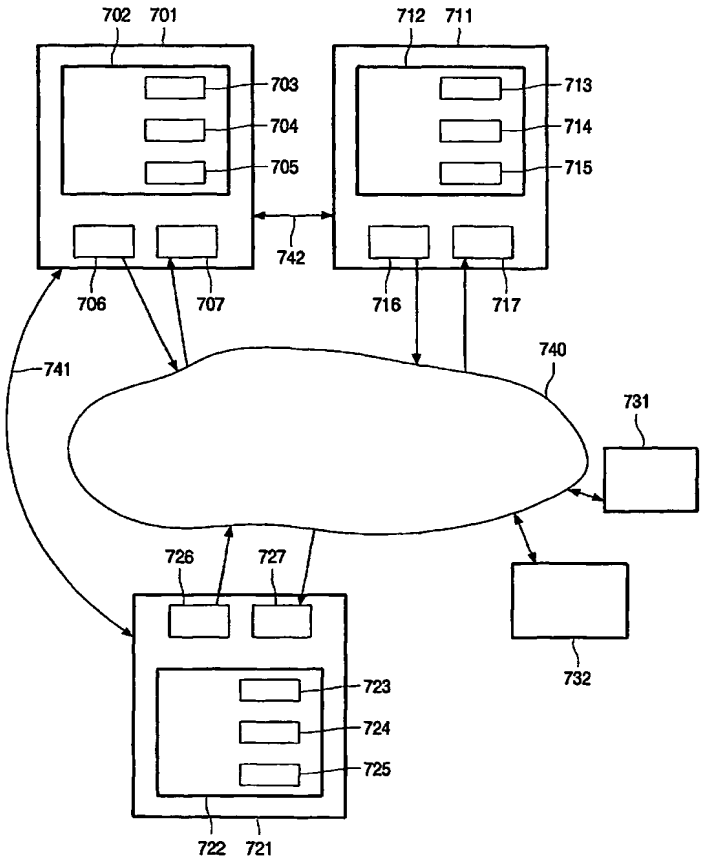
(54) Title: PRESERVING PRIVACY WHILE USING AUTHORIZATION CERTIFICATES



(57) Abstract: The invention proposes a method to provide privacy for users or a user from a group of users with respect to authorizations they are granted, where such authorizations are expressed using digital authorization certificates, and with respect to domain certificates in case of groups of users. The idea is to conceal the user identity in the certificates, while the certificate itself remains in the clear. In this way, certificates can be widely and openly available, e.g. in a public network, without a random observer being able to link a user to an authorization or to identify a user within a domain. Privacy is also provided towards the certificate verifier by means of zero-knowledge protocols, which are carried out between the user and the verifier in order for the verifier to check a user's entitlement to a certificate. Privacy is further provided towards the certificate issuer as well, by means of a mechanism that allows the anonymous (buying or) issuing of certificates from the issuer.

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